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From: Davis, Minh-Tam
Sent: Wednesday, May 24, 2000 12:15 PM
To: STIC-ILL
Subject: Reprint request

For 07/431533
1) Smith, LI, 1988, Biochemistry, 27(10): 3747-53
2) Hofmann, HD, 1987, J Neurochemistry, 48(5): 1425-33.
Thank you.
Minh-Tam Davis
ART UNIT 6142, Room 8A01
305-2008

5/24

06328190 88309779

Identification of cysteine-644 as the covalent site of attachment of dexamethasone 21-mesylate to murine glucocorticoid receptors in WEHI-7 cells.

Smith LI; Bodwell JE; Mendel DB; Ciardelli T; North WG; Munck A

Department of Physiology, Dartmouth Medical School, Hanover, New Hampshire 03756.

Biochemistry (UNITED STATES) May 17 1988, 27 (10) p3747-53, ISSN 0006-2960 Journal Code: A0G

Contract/Grant No.: DK 03535, DK, NIDDK; AM 07508-02, AM, NIADDK

Languages: ENGLISH

Document type: JOURNAL ARTICLE

Dexamethasone 21-mesylate is a highly specific synthetic glucocorticoid derivative that binds covalently to glucocorticoid receptors via sulfhydryl groups. We have identified the amino acid that reacts with the dexamethasone 21-mesylate by using enzymatic digestion and microsequencing for radiolabel. Nonactivated glucocorticoid receptors obtained from labeling intact WEHI-7 mouse thymoma cells with [3H]dexamethasone 21-mesylate were immunopurified and analyzed by sodium dodecyl sulfate-polyacrylamide gel electrophoresis. The purified approximately 100-kDa steroid-binding subunit was eluted from gel slices and subjected to enzymatic digestion. Trypsin digestion followed by reversed-phase high-performance liquid chromatography (reversed-phase HPLC) produced a single [3H]dexamethasone 21-mesylate labeled peptide. Automated Edman degradation of this peptide revealed that the [3H]dexamethasone 21-mesylate was located at position 5 from the amino terminus. Dual-isotope labeling studies with [3H]dexamethasone 21-mesylate and [35S]methionine demonstrated that this peptide contained methionine. Staphylococcus aureus V8 protease digestion of [3H]dexamethasone 21-mesylate labeled steroid-binding subunits generated a different radiolabeled peptide containing label at position 7 from the amino terminus. On the basis of the published amino acid sequence of the murine glucocorticoid receptor, our data clearly identify cysteine-644 as the single residue in the steroid-binding domain that covalently binds d

10/3,K,AB/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

06326810 88276890

A transcription factor active on the epidermal growth factor receptor gene.

Kageyama R; Merlino GT; Pastan I

Laboratory of Molecular Biology, National Cancer Institute, Bethesda, MD 20892.

Proceedings of the National Academy of Sciences of the United States of America (UNITED STATES) Jul 1988, 85 (14) p5016-20, ISSN 0027-8424 Journal Code: PV3

Languages: ENGLISH

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We have developed an in vitro transcription system for the epidermal growth factor receptor (EGFR) oncogene by using nuclear extracts of A431 human epidermoid carcinoma cells, which overproduce EGFR. We found that a nuclear factor, termed EGFR-specific transcription factor (ETF), specifically stimulated EGFR transcription by 5- to 10-fold. In this report, ETF, purified by using sequence-specific oligonucleotide affinity chromatography, is shown by renaturing material eluted from a NaDodSO4/polyacrylamide gel to be a protein with a molecular mass of 120 kDa. ETF binds to the promoter region, as measured by DNase I "footprinting" and gel-mobility-shift assays, and specifically stimulates the transcription of the EGFR gene in a reconstituted in vitro transcription system. These results suggest that ETF could play a role in the overexpression of the cellular oncogene EGFR.

Jul 1988,

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; Base Sequence; Cell Nucleus--Analysis--AN; Chromatography, Affinity; Deoxyribonuclease I--Metabolism--ME; DNA--Metabolism--ME; Electrophoresis, Polyacrylamide Gel; Molecular Weight; Oncogenes; Promoter Regions (Genetics); Protein Denaturation; Transcription Factors--Isolation a

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? ds

Set      Items    Description
S1      250958    SDS(W)PAGE OR GEL(5N)ELECTROPHORESIS
S2       69565    ELUT?
S3        8797    S1 AND S2
S4        3253    S3 AND PY<=1989
S5      885786    PURIF?
S6        2482    S4 AND S5
S7        3493    ELUT? (5N)GEL
S8        1439    S1 AND S7
? s s8 and py<=1989

Processing
            1439  S8
        17890393  PY<=1989
      S9     501  S8 AND PY<=1989
? s s9 and py<1989

             501  S9
        16758122  PY<1989
     S10     443  S9 AND PY<1989
? t s10/3,k,ab/1-10


 10/3,K,AB/1      (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
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; Cell Line; Chromatography, High Pressure Liquid; Dexamethasone --Metabolism--ME; Electrophoresis, Polyacrylamide Gel; Kinetics ; Mice; Molecular Weight; Peptide Fragments--Analysis--AN; Receptors, Glucocorticoid--Isolation and Purification--IP

10/3,K,AB/2 (Item 2 from file: 155)
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A transcription factor active on the epidermal growth factor receptor gene.
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Characterization and partial purification of a novel neuronotrophic factor from bovine seminal vesicle.

Hofmann HD; Unsicker K

Journal of neurochemistry (UNITED STATES) May 1987, 48 (5) p1425-33, ISSN 0022-3042 Journal Code: JAV

Languages: ENGLISH

Document type: JOURNAL ARTICLE

Extracts from bovine seminal vesicles have been shown to contain high concentrations of nerve growth factor (NGF)-like biological activity and of the NGF protein with properties corresponding to that of NGF from other sources. We now demonstrate that a second neuronotrophic protein, termed seminal vesicle-derived neuronotrophic factor (SVNF), is present in seminal vesicle extracts (SVEs), which could not be distinguished from NGF on the basis of biological activity. SVNF has neuronotrophic activity on NGF target cells like embryonic chicken-sensory and sympathetic neurons, sympathetic neurons, and chromaffin cells from neonatal rats, but it is inactive on embryonic chicken ciliary or neonatal rat nodose ganglion neurons. It also stimulates fiber outgrowth from rat pheochromocytoma (PC 12) cells. In gel filtration chromatography on Biogel A 1.5 m, the activity is eluted with an apparent molecular weight of 40 kilodaltons, and by preparative isoelectric focusing, the isoelectric point was determined to be in the neutral range (6.8-7.8). The biological activity of SVNF, in contrast to that of NGF, is partially retained after preparative sodium dodecyl sulfate-polyacrylamide gel electrophoresis and can be electrophoretically eluted with an apparent molecular weight of 16-20 kilodaltons. Electrophoretically purified SVNF is not inhibited by antisera to mouse NGF, but its activity is increased greater than 10-fold in the presence of very low concentrations of NGF. For partially purified SVNF, a specific activity of 2.9-5.8 X 10(5) biological units/mg of protein was determined in the presence of subthreshold NGF concentrations. (ABSTRACT TRUNCATED AT 250 WORDS)

May 1987,

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